

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



United States
Department of
Agriculture

Economic
Research
Service

March 1985

What's Happening to Food Costs?

U.S. DEPARTMENT OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY

NOV 3 1997

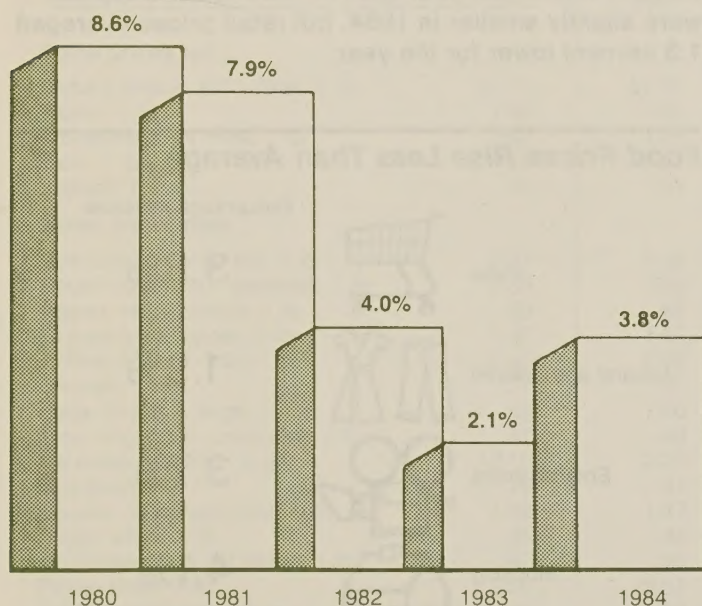
CATALOGING PREP.

What's happening to food costs? How much are they changing, and why? How much of the food dollar goes to the farmer and how much to food processors and marketers? Because of the great interest in these questions, Congress has directed the U.S. Department of Agriculture to study them regularly and report its findings. This pamphlet, from USDA's Economic Research Service, brings you up to date on the answers, focusing on developments during 1984.

Food Prices Rise Moderately Again in 1984

Large commodity supplies and a moderate inflation rate continued to moderate increases in food prices last year. Food prices, as measured by the Consumer Price Index (CPI), rose 3.8 percent in 1984, nearly the same as in 1982 but above the 1983 increase of 2.1 percent, which was the smallest since 1967.

Food Prices Continue Moderate Rise



CPI, annual averages.

This pamphlet was prepared in the National Economics Division of the Economic Research Service by Denis Dunham, and is based on a more detailed report; see page 7 for information on how to obtain it. The Economic Research Service carries out research on many aspects of food economics of concern to consumers, farmers, and the food industry.

Changes in Consumer Price Indexes for Food and Other Items

Year	Food			CPI all items	All items less food
	Total	At home	Away from home		
Percent					
1980	8.6	8.0	9.9	13.5	14.6
1981	7.9	7.3	9.0	10.4	10.9
1982	4.0	3.4	5.3	6.1	6.6
1983	2.1	1.1	4.4	3.2	3.4
1984	3.8	3.7	4.2	4.3	4.4

Data from Bureau of Labor Statistics.

Food prices in 1984 rose more slowly at supermarkets and other grocery stores than at eating places, continuing a trend of recent years. Prices at grocery stores went up 3.7 percent while restaurant meal prices climbed 4.2 percent. Restaurant meal prices increased about the same amount as the year before, whereas food prices in grocery stores rose much more than the previous year. In 1983, prices in grocery stores rose only 1.1 percent, mainly because of very large meat supplies and a decline in meat prices.

There were several reasons for the larger rise in retail prices in 1984. Farmers got moderately higher prices for food commodities, following a drop in 1983. Charges for processing, distributing, and retailing food rose more rapidly than in 1983. Consumer demand for food, as measured by expenditures adjusted for price increases, went up nearly 2 percent reflecting a substantial rise in personal disposable income. In contrast, prices of imported foods and fish rose about the same in 1984 as in 1983.

Much of the 1984 rise in food prices was due to freezing weather that sharply reduced supplies of winter vegetables, damaged the Florida and Texas citrus crop, and disrupted livestock marketings in the Midwest. Poultry and egg producers slowed production due to low returns; that caused chicken and egg prices to rise sharply early in the year.

The CPI for food changed little after the first quarter of the year. Some prices, including those for chicken and eggs, fell sharply. The major factor moderating the rise in the CPI for food was retail meat prices. They averaged only a fraction of a percent higher in 1984, the second consecutive year of nearly stable prices. This was good news for consumers since meat accounts for

a large portion of consumer purchases. Prices of most other foods were higher: fresh fruit prices were about 11-percent higher, mainly due to high orange prices.

Farmers received higher prices for most food commodities in 1984 mainly due to tight supplies in the early part of the year. The farm value of foods sold in grocery stores rose by 5.3 percent in 1984 following a 2.2-percent decline in 1983. Most of the 1984 increase in farm value reflected higher prices for poultry, eggs, fruits, vegetables, and food products derived from oilseeds. Farm value of red meats averaged 2.5 percent higher in 1984. Higher prices for the farmer caused about two-fifths of the 3.7-percent rise in food prices in grocery stores.

Much of the remaining price rise came from a higher farm-to-retail price spread, the difference between what farmers receive for food and its retail price. The price spread is the charge for processing, distributing, and retailing foods.

Last year the farm-to-retail spread rose by 3.2 percent, slightly more than in 1983. The increase in marketing charges was similar in amount to the rise in major food marketing costs including labor, packaging, and transportation costs. Higher marketing charges were the main cause of the retail food price increase, accounting for slightly less than half of the 3.7-percent rise.

Retail prices of imported foods (chiefly coffee, sugar, and bananas) and fish, which account for less than one-fifth of grocery store food sales, rose less than prices of domestic foods. Last year, prices of these foods rose an average of 2.6 percent and, therefore,

contributed to the moderate rate of food price inflation last year.

Food Prices Up Less Than Average

For the sixth consecutive year, food prices rose more slowly than the CPI for all consumer products and services, 3.8 versus 4.3 percent. Among the major items in the CPI, prices of apparel and upkeep rose 1.9 percent, housing 4.1 percent, transportation 4.5 percent, and medical care 6.2 percent.

Retail Prices of Most Foods Rise

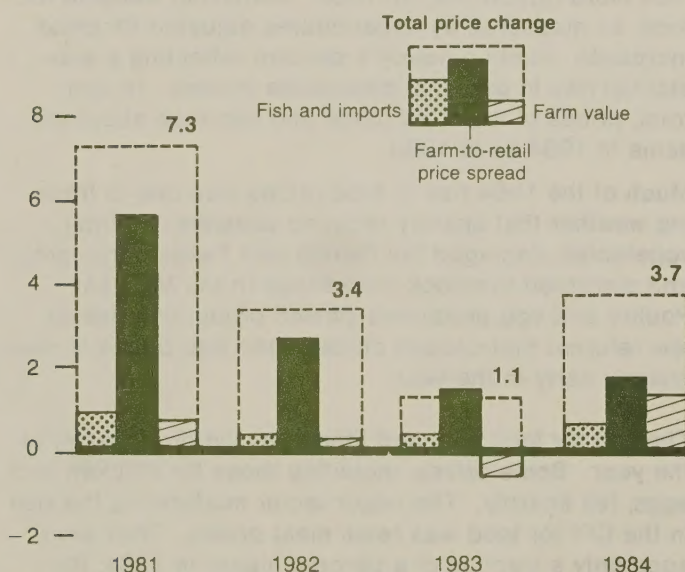
Prices of most foods that we buy at the supermarket averaged a few pennies higher in 1984. But prices of some foods were much lower at year's end than early in the year. Poultry and egg prices reached record highs in February, but declined for the rest of the year. Prices were virtually unchanged for some staple foods including milk, bread, sugar, and flour.

Here's a wrapup of price changes at the supermarket last year.

Meat and Poultry. Record large supplies held down red meat prices for the second consecutive year. Beef supplies were bolstered by continued liquidation of cattle herds. Beef cow slaughter and other nonfed cattle slaughter was particularly high. As a consequence of large supplies, retail beef and veal prices were only 1.2 percent higher last year than in 1983. Pork supplies were slightly smaller in 1984, but retail prices averaged 1.3 percent lower for the year.





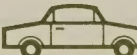
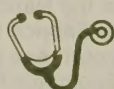
Farm-to-Retail Price Spread Boosts Food Prices the Most

Percent



Total price change from food-at-home index, Consumer Price Index. Bars represent percentage point contribution of each factor to total price change.

Food Prices Rise Less Than Average

	Percentage increase
Food 	3.8%
Apparel and upkeep 	1.9%
Entertainment 	3.7%
Housing 	4.1%
Transportation 	4.5%
Medical care 	6.2%
CPI, all items	4.3%

CPI annual average, 1984.

Poultry prices averaged 10.6 percent higher in 1984, partly in response to a slow rate of increase in broiler production during the first half of the year. Egg prices averaged 11.7 percent higher, mainly because egg producers cut back production early in the year in response to higher feed costs and low returns. Both chicken and egg prices dropped sharply during the year and by December prices were equal to or below those of a year earlier.

Dairy Foods. Retail prices of milk and other dairy products rose only 1.3 percent in 1984, about the same as in 1983. Fresh whole milk prices have averaged about \$1.13 per half-gallon for 4 years. Prices of cheese, ice cream, and other processed dairy products rose about 2 percent in 1984, about the same as in the last 2 years.

Crop Foods. Retail prices of most foods made from crops were higher in 1984, partly because of a sharp jump in grain and soybean prices when 1983's summer drought severely damaged crops. Retail prices of fats and oils, such as vegetable shortening and margarine, averaged 9.5 percent higher.

How Register Tapes Compared Average U.S. Food Prices

Item and unit size	1983	1984
Some prices fell . . .		
Ground chuck, 100% beef, 1 lb.	\$1.73	\$1.72
Bacon, 1 lb.	1.94	1.86
Frankfurters, all meat, 1 lb.	1.81	1.80
Flour, 1 lb.	.22	.21
Lettuce, 1 lb.	.55	.51
Some prices rose . . .		
Pork chops, center cut, 1 lb.	2.37	2.38
Round beef roast, boneless, 1 lb.	2.55	2.58
Apples, red delicious, 1 lb.	.59	.66
Orange juice, frozen, 1 lb.	1.37	1.62
Coffee, ground, 1 lb.	2.47	2.58
Chicken, 1 lb.	.72	.81
Eggs, Grade A large, 1 doz.	.89	1.00
Rice, long grain, uncooked, 1 lb.	.47	.48
Ice cream, regular, 1/2 gal.	2.16	2.22
Tomatoes, 1 lb.	.79	.81
Cookies, chocolate chip, 1 lb.	1.82	1.87
Sugar, white, 1 lb.	.35	.36
Shortening, veg. oil. blend, 1 lb.	.82	.92
Potato chips, 1 lb.	2.50	2.57
Cola, nondiet can, 16 oz.	.48	.49
Potatoes, 1 lb.	.21	.24
Others stayed the same . . .		
Bread, white, 1 lb.	.54	.54
Milk, whole 1/2 gal.	1.13	1.13
Tomatoes, canned, 1 lb.	.53	.53

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Processed and packaged goods cost 4.4 percent more than in 1983, mostly because of increases in manufacturing and distributing costs, which account for most of their price.

The price of sugar and artificial sweeteners rose 3.9 percent, with candy and other sweets accounting for most of that. Sugar prices rose little because of ample domestic supplies and little increase in the price support for sugar.

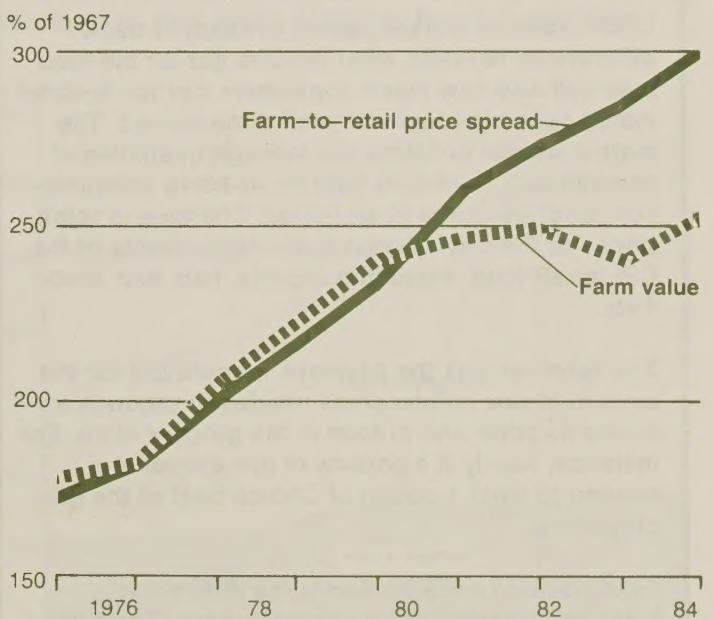
Fruits and Vegetables. Last year fresh fruit cost an average 11.1 percent more than in 1983. Fruit prices rose mainly because of much smaller supplies, particularly of oranges. Sales of fresh oranges declined by 20 percent in the 1983/84 season. Retail fresh orange prices averaged 35 percent higher in 1984.

Fresh vegetable prices rose sharply in the first quarter of 1984. A freeze in Florida and Texas in December 1983 greatly reduced supplies of some winter vegetables, particularly tomatoes and peppers. Prices of most vegetables dropped later in the year, but 1984 prices averaged 10.9 percent higher than in 1983, mainly reflecting higher potato prices—about 25 percent higher because of a small 1983 fall potato crop.

Farm Value Up

The farm value (what farmers receive) of USDA's "market basket" of foods rose by 5.3 percent in 1984, the first time since 1978 that the farm value increase exceeded the retail food price increase. However, because of depressed farm prices over several years, the 1984 farm value of foods was only 7 percent above the

Food Marketing Charges Outpace Farm Value



Farm value represents prices received by farmers for commodities equivalent to a fixed market basket of foods. Price spread is the difference between farm value and retail cost of the market basket and represents all charges for processing and distribution.

1980 value; in contrast, retail food prices had risen 17 percent over the same time.

Farm values for most commodities were higher last year. Farmers received 2.5 percent more for red meat products in USDA's shopping cart in 1984 than in 1983, reflecting stronger consumer demand for beef and pork. The farm value of fresh fruit rose by 43 percent in response to 20-percent fewer oranges sold fresh, 6-percent fewer grapes, and smaller supplies of several other fresh fruits.

A combination of production cutbacks and tight supplies boosted farm values of other commodities. For example, farmers received 66 cents for a dozen eggs sold in the store, 8 cents more than in 1983. Frying chicken also rose, by 6 cents per pound. Farm value of fats and oils rose 29 percent, mainly because of higher prices for soybeans. In contrast, plentiful wheat supplies meant that farmers received only 4.3 cents for the wheat in a 1-pound loaf of white bread selling for 54 cents in supermarkets, 0.2 cent less than in 1983. The value of other ingredients was 0.8 percent, 0.1 cent more than in 1983.

Price Changes and Farm Share for a Market Basket of Foods Produced on U.S. Farms

Year	Farm value of food	Retail store prices	Farm-to-retail price spread	Farm value share of retail price
-----Percent change-----				Percent
1980	5.1	7.2	8.6	37
1981	2.8	7.7	10.5	36
1982	.2	3.6	5.5	34
1983	-2.2	.9	2.5	33
1984	5.3	3.9	3.2	34

About the Market Basket

USDA uses its market basket concept to track differences between what farmers get for the food they sell and how much consumers pay for it, commonly called the farm-to-retail price spread. The market basket contains the average quantities of domestically produced food for at-home consumption purchased in a base period. Changes in retail prices of the market basket are components of the CPI for all food, excluding imports, fish, and shellfish.

The *farm value* is the payment farmers get for the amount of raw commodities needed to produce a pound or other unit of food in the grocery store. For instance, nearly 2.4 pounds of live animal are needed to yield 1 pound of Choice beef at the grocery store.

Farm-to-retail price spread is the difference between the retail price and farm value. The price spread is the charge for processing, distributing, and retailing foods.

Farm Value Share of Food Price Increases

The farm value averaged 34 percent of the retail cost for a market basket of foods, up from 33 percent for 1983, but down from 36 percent in 1981, and 37 percent in 1980. The farm share of the food dollar has declined in recent years because abundant food supplies held down farm prices while retail prices rose faster because of rising processing and distributing charges.

Farm value percentages vary greatly among foods. Farm value is a much larger percentage of the retail price of meats, eggs, poultry, and dairy products than for most other foods. Thus, changes in prices received by farmers for these commodities usually affect retail food prices the most. For example, higher farm prices for eggs and poultry caused most of the rise in retail egg and poultry prices. Livestock prices rose very little in 1984, which accounted for the very small change in retail meat prices.

The farm value of most foods that come from crops represents a small share of the retail price. Last year, farmers received 11 percent of bakery and cereal prices, 20 percent of the retail price of processed fruits and vegetables, and 29 percent of fresh fruit and vegetable prices. Thus, even though there was a 43-percent increase in the farm value of fresh fruit, the rise in average retail fruit prices was 11 percent.

Farm-to-Retail Price Spread Widens

The farm-to-retail price spread rose 3.2 percent in 1984, about equaling the overall rate of inflation for the

Farm Value Share of Foodstore Prices

	1984 retail price	Farm value	Farm value share of retail price
Eggs, large, 1 doz.	\$1.02	\$0.66	64%
Choice beef, 1 lb.	2.40	1.40	58
Chicken, 1 lb.	.81	.44	54
Milk, ½ gal.	1.13	.58	52
Pork, 1 lb.	1.62	.77	48
Frozen orange juice, 12 oz.	1.22	.48	39
Sugar, 1 lb.	.35	.14	40
Potatoes, Northeast, 10 lbs.	1.91	.68	35
Oranges, Calif., 1 lb.	.50	.17	33
Tomatoes, 1-lb. can	.53	.05	9
White bread, 1 lb.	.54	.05	9
Lettuce, 1 lb.	.50	.04	8
Potatoes, frozen, French fried, 1 lb.	.67	.10	14

Computed from unrounded data.

economy of 3.7 percent as measured by the GNP implicit price deflator. This similarity arises because food industry charges for handling, processing, and retailing food commodities represent an accumulation of the costs of inputs purchased from other industries in the economy. Moreover, increases in hourly earnings of food industry workers were not too different from average wage increases in other industries.

Annual changes in farm-to-retail price spreads among food groups differ because of large variations in farm prices, the normal lag in retail price adjustment, and different rates of increase in marketing costs. Last year, price spreads for fresh vegetables and eggs rose by about 12 percent because shortages early in the year caused retail prices to soar. But that was unusual for eggs. The farm-to-retail price spread for eggs stayed at 33-35 cents per dozen from 1980-83, but rose to 37 cents last year. During this period, there also was little change in the spread between the retail price and farm value of frying chickens. Last year it was 37.5 cents per pound, only 4 cents more than in 1980.

The farm-to-retail price spread for meat products narrowed last year because slightly higher livestock prices were not fully reflected at the retail level. Price spreads for meat have gone up relatively little in the past several years.

The price spread for dairy products rose about 3.6 percent in 1984 reflecting stronger demand for processed products and a slight drop in the farm price of milk. The price spreads for bakery and cereal products and processed fruits and vegetables widened between 4 and 5 percent. These increases probably reflected rising packaging and labor costs associated with the high degree of processing these foods undergo. The price spread for poultry and fats and oils increased only 2 to 3 percent in 1984.

Price Spreads Steady for Beef, Pork

Meat	Retail price per pound	Farm value ¹	Farm-to- retail price spread	Farm value share of retail price
	-----Dollars-----			Percent
Choice beef:				
1980	2.38	1.45	0.93	61
1981	2.39	1.39	1.00	58
1982	2.42	1.40	1.02	58
1983	2.38	1.36	1.02	57
1984	2.40	1.40	1.00	58
Pork:				
1980	1.39	.63	.76	45
1981	1.52	.70	.82	46
1982	1.75	.88	.87	50
1983	1.70	.77	.93	45
1984	1.62	.77	.85	48

¹For quantity of live animal equivalent to 1 retail pound; for beef, 2.4 pounds and for pork, 1.7 pounds, minus byproduct allowance.

Spending on Domestic Foods at \$332 Billion

During 1984, consumers spent \$332 billion for foods produced on U.S. farms—\$17 billion (about 5.5 percent) more than in 1983. This amount includes purchases of farm foods in foodstores, roughly two-thirds of the total, and at away-from-home eating places. However, this figure does not include the money we spent for imported foods and seafoods. Rising prices and a larger population boosted spending for domestically produced foods. Consumers bought slightly less quantity of food per person, mainly due to smaller supplies of fresh fruits. Consumers spent the most on red meat products. For 1983, the latest data available, meat purchases were 30 percent of total expenditures of farm foods.

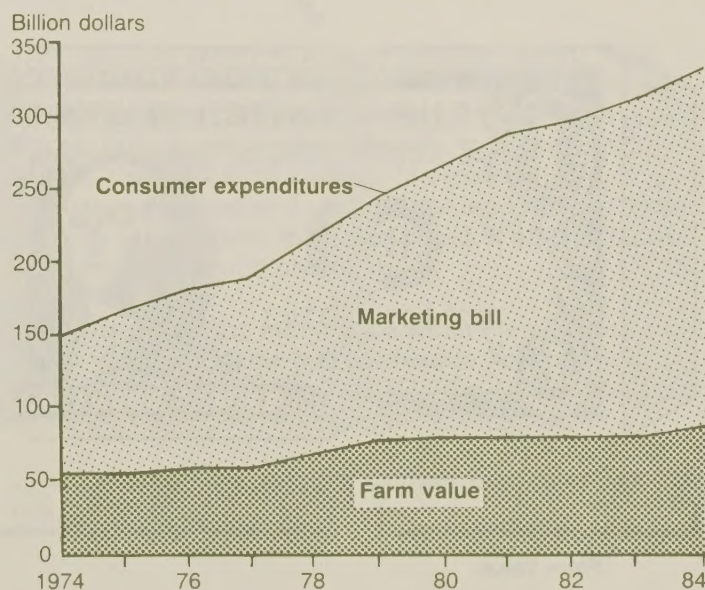
About 27 percent of last year's food spending went back to farmers, who received about \$89 billion. This share is a weighted average of the 33-percent farm share of food-at-home and the much lower 15-percent

What Consumers Bought With Their Food Dollars

	Billion dollars	Percent
Meats	94.2	30
Fruits and vegetables	66.5	21
Dairy products	45.0	14
Bakery products	31.0	10
Poultry	16.3	5
Grain mill products	9.2	3
Eggs	5.4	2
Other foods	47.4	15
Consumer expenditures	315.0	100

1983 data.

Marketing Bill Adds Most to Food Spending



For domestic farm foods purchased by civilian consumers for consumption at home and away from home.

share of away-from-home food spending. The remaining \$243 billion—the marketing bill—went to the food industry for handling, processing, and retailing foodstuffs after they left the farm. The marketing bill was up by \$12.5 billion in 1984, and thus accounted for nearly 75 percent of the year's increase in consumer expenditures.

Higher Labor Costs Add Most to Marketing Bill

About \$5.5 billion of the \$12.5 billion marketing bill increase can be traced to rising labor costs. Packaging materials and food containers added another \$2 billion. Industry profits also climbed in 1984. Here is USDA's analysis of what happened to food industry costs for:

Labor. Increases in employee wages and benefits and a rise in employment boosted total food industry labor costs by 5.5 percent to \$108 billion in 1984. This was about one-third of total consumer food spending, and was over one-fifth larger than the farm value.

The increase in labor costs, while a large dollar amount, represented a modest percentage increase for the third consecutive year, resulting in part from a slower rise in consumer prices that lessened wage demands. In addition, some workers, particularly in food retailing and meatpacking, gave up wage increases and benefits to enable their employers to remain competitive.

Average hourly earnings in food retailing and manufacturing rose by less than 3 percent in 1984, according to data on employment and earnings published by the Department of Labor.

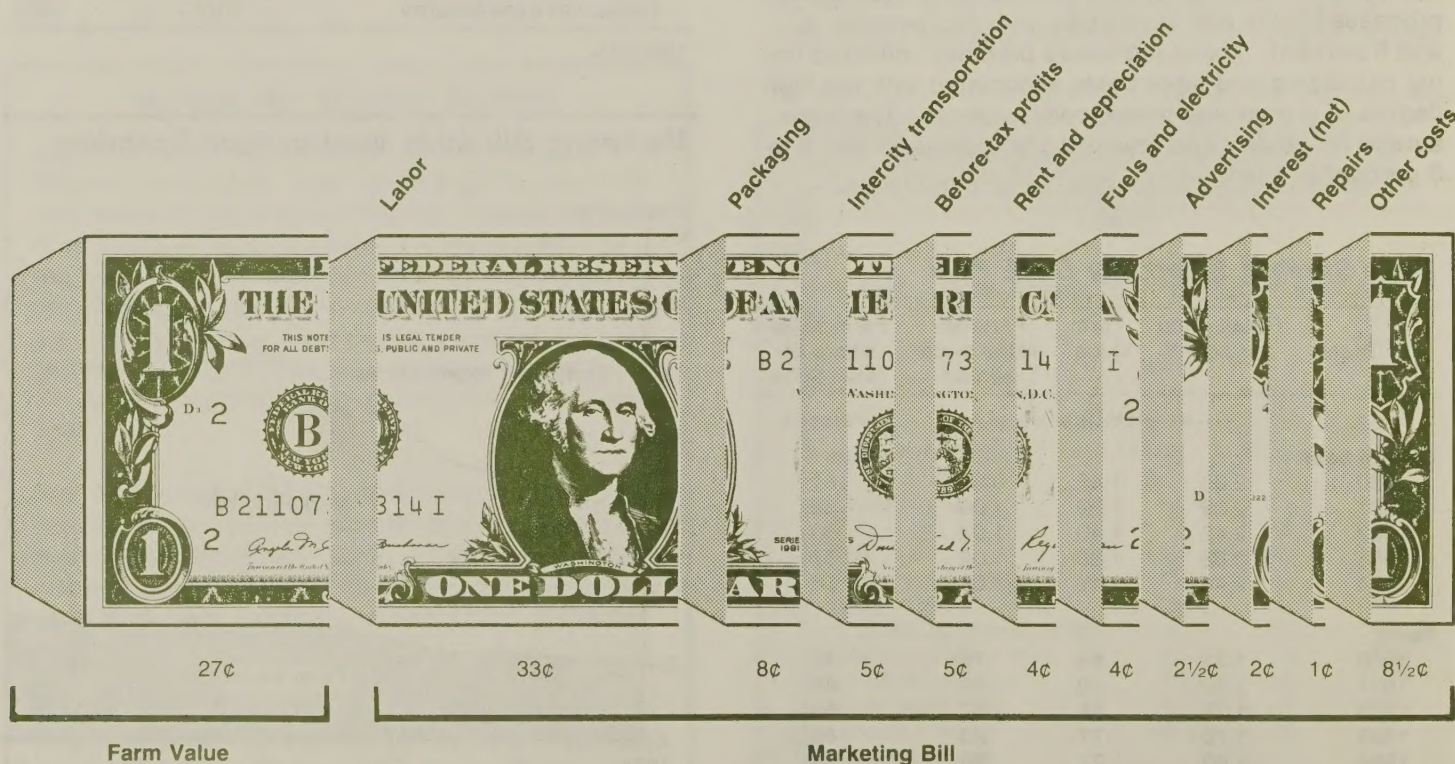
Most collective bargaining settlements in the food industry in 1984 provided for relatively small wage increases for retail foodstore clerks and meatcutters. In some markets, workers in food retailing received no wage increase during the first year of their contract. Food retailing labor costs were tempered in some instances by reduced pay for holiday and evening work, reduced benefits such as vacation time, and the relaxation of work rules that, retailers felt, hurt productivity.

Packaging. Costs for food containers and packaging materials were sharply higher in 1984 mainly because of price increases for paperboard shipping boxes and plastic materials. At \$26.7 billion, these costs were 8 percent of total consumer expenditures for farm foods.

Transportation. The cost of transporting foods was \$16 billion in 1984, about 3 percent more than in 1983 due to higher freight rates and a larger volume of food marketed. Railroad freight rates for food products rose about 4.6 percent; truck rates for hauling produce and other foods were held down by lower diesel fuel prices and strong industry competition from an increased number of independent truckers.

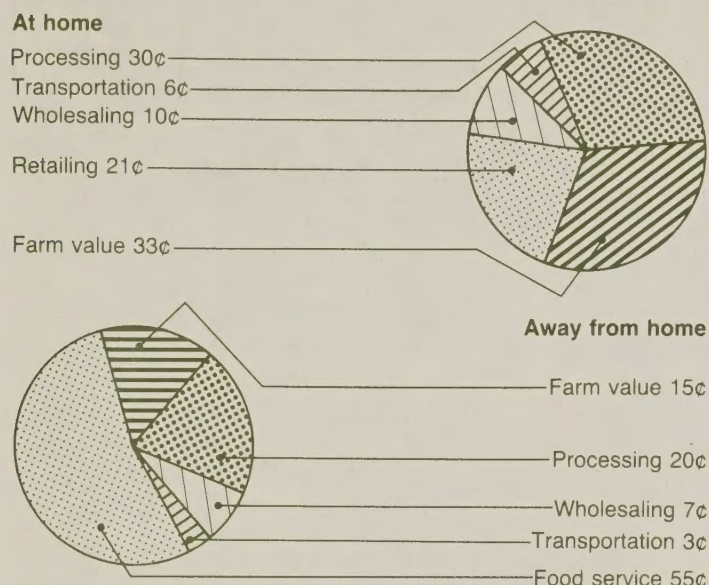
Energy. The energy bill of food processors, wholesalers, and retailers was about \$13 billion in

What a Dollar Spent on Food Paid for in 1984



Includes food at home and away from home. Other costs include property taxes and insurance, accounting and professional services, promotion, bad debts, and many miscellaneous items.

Components of the Food Dollar Spent for At-Home and Away-from-Home Consumption



1984 data.

1984, about 4 percent of expenditures for farm foods. Energy costs rose sharply through 1981, but slowed markedly in the past 3 years. Last year, the rise in energy costs was slowed by large petroleum stocks that stabilized natural gas and diesel fuel prices. Electric rates, however, rose about 5 percent.

Food Industry Profits Rise

Dollar profits of the food industry rose in 1984 due to increases in sales and margins. Food industry profits before taxes from marketing foods of domestic origin were about \$16 billion or 5 percent of consumer spending for farm foods.

Based on Federal Trade Commission data for the first 9 months of 1984, aftertax profits of manufacturers of food and kindred products were 3 percent of sales in 1984, the same as in 1983. Returns on stockholders'

Food Industry Aftertax Profit Margins

Year	Percent of sales		Percent of stockholder equity	
	Food manufacturers	Retail food chains	Food manufacturers	Retail food chains
1980	3.4	0.9	14.7	13.7
1981	3.1	1.0	13.6	13.9
1982	3.1	.9	13.0	12.7
1983	3.3	1.1	12.3	13.6
1983 (9 months)	3.0	1.0	11.3	12.4
1984 (9 months)	3.0	1.2	12.4	15.4

equity rose slightly, from 11.3 percent to 12.4 percent, still slightly below the long-term average rates of return for food manufacturers.

Aftertax profits of food chains averaged 1.2 percent of sales in the first 9 months of 1984 compared with 1.0 percent a year earlier. Return on stockholder equity also went up, and was much higher for food chains in 1984 than in other years over the past decade. The reason for the increase appeared to be rising sales volume and relatively stable costs, enabling retailers to widen margins.

Food Spending Increases Less Than Income

Although food costs are rising, they are not increasing as much as total consumer income. A declining proportion of income spent for food, leaving more money for other things, is an often-used indicator of a rising standard of living.

In 1984, food spending (for domestically produced as well as imported foods and fish) was 15.2 percent of total personal disposable income, down from 15.6 percent in 1983 and 16.8 percent 10 years ago. The share declined very little in most years, especially with the relatively high food price inflation in the 1970's. Last year, moderate inflation coupled with a large boost in disposable income reduced the share of income spent on food by a larger amount than in most years over the past decade. The proportion of income spent on food varies widely by income levels. Based on 1981 data, the latest available by income group, consumers with incomes between \$5,000 and \$10,000 spent 24 percent of their income for food whereas consumers with incomes of \$30,000 and over spent an average of 10 percent.

Would You Like More Information?

This report is based on a more detailed report, *Food Cost Review, 1984*, to be published this spring. In addition to reporting on recent development in food prices, farm-to-retail price spreads, food spending, profits, and marketing costs in the food industry, it discusses price spread changes for leading food items such as Choice beef, milk, and bread. It also includes statistical tables and charts.

To receive ordering information when the report is issued, send your name and address to Food Market Analysis, Economic Research Service, USDA, 500 12th St., S.W., Room 278, Washington, D.C. 20250.

Call Denis Dunham at (202) 447-8801 if you need further information.



1022384683

Department of Agriculture

Washington, DC
20250OFFICIAL BUSINESS
Penalty for Private Use, \$300Postage and Fees Paid
U.S. Department of Agriculture
AGR-101

THIRD CLASS BULK RATE

Also Available from USDA's Economic Research Service . . .

Food Consumption, Prices, and Expenditures, 1963-83.
SB-713. November 1984. 116 pp. \$4.50. Order SN: 001-019-00370-7 from GPO.

Over 100 tables present the latest annual estimates of per capita food consumption by product, food supplies and use, nutrient availability, and retail and producer price indexes.

1984 Handbook of Agricultural Charts. AH-637. December 1984. 92 pp. \$3.75. Order SN: 001-019-00368-5 from GPO.

Trends come alive with 272 charts depicting all significant aspects of agriculture. A valuable research tool, popular teaching device, and convenient format for presenting a complete overview of the agricultural sector. The charts il-

lustrate data and trends for agricultural subjects ranging from farm income to consumer costs, and from commodities to agricultural trade.

How to Order

Order these reports from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Include name, address, zipcode, and full title of the report. Allow 6 weeks for processing. Make check or money order payable to "Superintendent of Documents." Or charge your purchase to your GPO Deposit Account (include account number) or to VISA or MasterCard (include credit card number and expiration date). For further information, call the Government Printing Office order desk (202) 783-3238. Bulk discounts available.